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EDITORIAL

Welfare in Academia: A View from Europe

In a recent editorial (*Protein Science 2*:1549–1550, 1993), Paul Schimmel suggested why academic tenure, long held to be a cornerstone of intellectual freedom, may now be questioned by the U.S. Congress and the average taxpayer, who perceives Academia—a heavily government-supported institution—as a sheltered corner in a harsh world. In Europe, the issue of academic tenure is perhaps less sensitive, because research scientists and university staff represent a small fraction of the permanent positions funded by the taxpayer, and also because tenure is embedded in a social tradition that extends far beyond science and higher education. In spite of recent changes due to the worsening economic crisis, the "normal" situation for many people in Europe is still to have a lifetime appointment. Governments, local authorities, and public agencies give tenure to most of their employees soon after recruitment—street cleaners, train engineers, schoolteachers, and army personnel alike. This is naturally true of academic staff, from janitors to department heads. Not long ago, a French magazine rated jobs according to their "return-for-effort" ratio. Among state employees, the top score was achieved by assistant professors teaching literature in a small university. Their teaching load is moderate, and they spend exactly as little (or as much) time on research as they choose. Whatever they do, the paycheck will come at the end of the month, 12 months of the year, and its slow but steady increase is fixed by immovable regulations. Needless to say, the same also applies to full professors.

In Western Europe, unemployment has exceeded 10% for many years, and it now affects all job categories. Management positions in private industry, to which academic researchers often like to compare themselves, are no longer protected. Academics used to lament their poor compensation and low social status compared to former classmates with equivalent responsibilities in business. Now, they witness the trauma that these colleagues suffer when they lose their job and find none after months of searching. Many of us have friends or relatives going through this ordeal. The loss of income, which is mitigated by unemployment benefits in most Western countries, is a lesser punishment than the loss of status and self-esteem.

Tenure is no longer assured in an environment of lasting high unemployment. The changes in Eastern Europe might well be an indication of things to come. There, permanent positions in universities and research institutes have been canceled by the thousands, and the whole academic system needs to be rebuilt from scratch as these countries can no longer support their numerous expensive research laboratories. When a laboratory is closed, staff members must reapply on a case-by-case basis. We in Paris or Brussels cannot ignore what happens in places like Prague or Krakow, which are nearer to us than Rome or Madrid. In Germany, the same issues arise as universities are being forcefully reformed in the former German Democratic Republic. The German experience should be watched closely by academics in other Western countries. Reform there is likely to succeed, but the problems show how difficult it is to separate the grain from the chaff. If a scientist was unsuccessful under the former regime, is that proof of incompetence or just lack of political connections? The better-known research institutions and their directors could not escape being compromised by the regimes. Still, they attracted bright young students who now face a very uncertain future.

Appointing someone to a governmental tenured position is a political decision, and in times of restrictions, the frontier between scientific policy and politics may be fuzzy. An official reason for destroying the Eastern academic system was that, under past communist regimes, jobs were assigned on political and ideological grounds rather than on the basis of competence, and that academic institutions are replete with freeloaders. There is a certain truth in this accusation. The typical research institute in the former USSR or its satellites boasted a thousand or more employees, many of whom hardly ever came to work. The scientific output was what one would expect from only a handful of scientists, and in some cases, it may well have come from just that handful who did all the work. In Western countries, appointments may be less politically tainted. Can we nevertheless be certain that academic institutions never hire incompetent employees and that, after being hired, they all remain irreproachably productive? The current practice is to choose people on the basis of their past achievements rather than their potential for scientific innovation. Their performance in the long run is not guaranteed. Even though drastic measures of the Eastern European type are not likely to be enforced in the West, the debate on the cost efficiency of basic science is rife in political circles here just like in the U.S. An academic system in which tenure is the rule should be extremely careful in recruiting its staff and faculty. Incompetence is indefensible. In teaching, it is a liability; in research, we shall soon lose whatever is left of the public trust in the scientists' ability to achieve progress unless we can show value for money. To make that clear, academics should be ready to accept employment conditions more in line with those prevalent in private institutions, with the alternative of being dismissed if performance is inadequate.

A welfare system that evolved during a long period of growth must adapt itself to the new environment of economic stagnation and do more than just keep people from starving, lest the gap between those who have permanent jobs and those who don't becomes intolerable. Which features of the European welfare system are necessary ingredients, and which are privileges of the past that must be reevaluated? Academic tenure is an obvious target for reform. It has a strong symbolic value and we believe, in agreement with Paul Schimmel, that it is not essential to the progress of science and education. Nowadays, its shortcomings may well exceed its advantages. Yet, the chances that a move to abolish lifetime tenure will come from the aca-

demics themselves are poor, considering how deeply the tradition is anchored in the social fabric. What is happening instead is a growing coexistence of two kinds of scientists and staff: those with permanent positions and those with short-term contracts. This creeping change toward job insecurity affects mostly younger scientists. Very short-term (typically 1 year) postdoctoral positions mushroom. Most are nonrenewable regardless of the proficiency of the holder, and the likelihood that they will lead to permanent positions is small. People hired in these temporary jobs have the same training and experience, and they perform the same teaching and research functions, as the lucky ones who reach the sheltered positions with tenure. For these excluded individuals, the academic welfare state has already been abolished. Indeed, they never knew it. Ten years ago, France changed from the long doctoral dissertation (requiring typically 7 years) to a shorter one. Under the old system, there were few thesis students, and most held a permanent position even as they started. Nowadays, French Ph.D. students are offered only 2 or 3 years of a rather lean scholarship. No extension is considered if the Ph.D. is not completed within 3 years, as often happens in biology, and the student must find other ways to sustain him/herself for another year or two.

Ph.D. students provide manpower to the laboratories and produce knowledge as much as they get training. There is no doubt that they are part of Academia, but definitely not of the Academic welfare state, neither in France nor in most European countries. The progressive shrinking of Academia as a welfare state gives these young people little hope of a decent career while leaving us, their elder colleagues with lifetime tenure, relatively free from worry. We should not blame them if they turn away from basic science. Ph.D.'s now graduate in much larger numbers than 25 years ago, when science was rapidly expanding and tenured positions were plentiful. Few among the recent graduates will be hired permanently in academic institutions. Does industry offer better prospects? In Germany, where most of the executives in drug and food companies have doctoral degrees, these firms are now aiming at zero growth. The situation is even worse in France. The industrial elite is trained in special institutions, the so-called Grandes Écoles, where students are usually more willing to get a degree in management (preferably in the U.S.) than to earn a doctorate. The management degree is a guarantee of getting a real job, whereas training in research may only increase the number of highly qualified unemployed people.

We witness this pauperization of science as bearing heavily on the next generation. Poorly paid graduate students and postdoctoral scientists on short-term contracts now form a large fraction of the staff in universities and research laboratories. Though most of their salary still comes from the taxpayer, they at least are not perceived as part of a sheltered academic world. As the system for recruiting permanent staff in scientific institutions now stands, the prospects are grim for young people. To give them a fair chance, we must change the system and offer alternatives to full tenure, which, in foreseeable budgets, can be granted to a small minority only. Once the administrative yoke of tenure is lifted, other possibilities ought to be explored, such as joint appointments in universities and industry. Limited-term positions (5 years) with decent salaries would give young scientists the opportunity of proving themselves before applying for tenured academic jobs under more favorable conditions are than offered by present short-term contracts, and would encourage them to look outside for positions in industry where their acquired competence can find fruitful use. Thus, a Ph.D. course must provide training for a much wider area of activity than just Academia and its immediate surrounding.

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